



Complete Summary

GUIDELINE TITLE

Screening for developmental dysplasia of the hip: recommendation statement.

BIBLIOGRAPHIC SOURCE(S)

United States Preventive Services Task Force (USPSTF). Screening for developmental dysplasia of the hip: recommendation statement. Rockville (MD): Agency for Healthcare Research and Quality; 2006. 10 p. [48 references]

GUIDELINE STATUS

This is the current release of the guideline.

COMPLETE SUMMARY CONTENT

SCOPE
METHODOLOGY - including Rating Scheme and Cost Analysis
RECOMMENDATIONS
EVIDENCE SUPPORTING THE RECOMMENDATIONS
BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS
QUALIFYING STATEMENTS
IMPLEMENTATION OF THE GUIDELINE
INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT
CATEGORIES
IDENTIFYING INFORMATION AND AVAILABILITY
DISCLAIMER

SCOPE

DISEASE/CONDITION(S)

Developmental dysplasia of the hip

GUIDELINE CATEGORY

Prevention
Screening

CLINICAL SPECIALTY

Family Practice
Pediatrics
Preventive Medicine

INTENDED USERS

Advanced Practice Nurses
Allied Health Personnel
Nurses
Physician Assistants
Physicians

GUIDELINE OBJECTIVE(S)

To summarize the U.S. Preventive Services Task Force recommendations on screening for developmental dysplasia of the hip and the supporting evidence

TARGET POPULATION

Infants, seen in primary care settings, who do not have obvious hip dislocations or other abnormalities evident without screening

INTERVENTIONS AND PRACTICES CONSIDERED

Insufficient Evidence to Recommend

1. Routine screening for developmental dysplasia of the hip using:
 - Physical examination of the hip and lower extremities using the Barlow and Ortolani procedures
 - Ultrasonography

MAJOR OUTCOMES CONSIDERED

Key Question 1: Does screening for developmental dysplasia of the hip (DDH) lead to improved outcomes (including reduced need for surgery and improved functional outcomes such as gait, physical functioning, activity level, peer relations, family relations, school and occupational performance)?

Key Question 2: Can infants at high risk for DDH be identified, and does this group warrant a different approach to screening than children at average risk?

Key Question 3: What is the accuracy of screening tests for DDH, and does screening for DDH lead to early identification of children with DDH?

Key Question 4: What are the adverse effects of screening?

Key Question 5: Does early diagnosis of DDH lead to early intervention, and does early intervention reduce the need for surgery or improve functional outcomes?

Key Question 6: What are the adverse effects of early diagnosis and/or intervention?

Key question 7: What cost-effectiveness issues apply to screening for DDH?

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

- Hand-searches of Published Literature (Primary Sources)
- Hand-searches of Published Literature (Secondary Sources)
- Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Note from the National Guideline Clearinghouse (NGC): A systematic review of the literature was prepared by the Oregon Evidence-based Practice Center (EPC) and Oregon Health & Science University for the Agency for Healthcare Research and Quality (AHRQ) for use by the U.S. Preventive Services Task Force (USPSTF) (see the "Companion Documents" field).

Literature Search Strategy

The most recent systematic reviews of screening for developmental dysplasia of the hip, by the American Academy of Pediatrics (AAP) and the Canadian Task Force on Preventive Health Care (CTFPHC), targeted many of the same questions as this report. EPC staff analyzed these reviews to focus the search strategy and eligibility criteria for their review. When questions had substantial overlap, they reviewed all studies identified in these reviews and searched the literature for studies published subsequently (after 1996 for the AAP review and 2000 for the CTFPHC review).

For most key questions, relevant studies were identified from multiple searches of MEDLINE (1966 to January 2005) and the Cochrane Library databases through June of 2004. Search strategies are described in Appendix 2 of the Evidence Synthesis (see the "Availability of Companion Documents" field in this summary). Additional articles were obtained by reviewing reference lists of other pertinent studies, reviews, editorials, and websites, and by consulting experts. EPC staff modified this strategy after reviewing the two previous systematic reviews (see Results section, subsection Previous Systematic Reviews). Specifically, for assessments of screening modalities in Key Question 3, they examined the literature beginning in 1996, the year in which the AAP review concluded.

Inclusion/Exclusion Criteria

Investigators reviewed all abstracts identified in the searches and the previous systematic reviews and determined eligibility by applying inclusion and exclusion criteria specific to key questions. Full-text papers of included abstracts were then reviewed for relevance. Eligible studies had English-language abstracts, were applicable to U.S. clinical practice, and provided primary data relevant to key questions. Non-English literature with English abstracts was reviewed to identify any controlled trials. EPC staff excluded so-called teratological developmental dysplasia of the hip, that occurring in children with neuromuscular disorders or other congenital malformations. For all included studies, initial screening had to be conducted in children less than 6 months of age, and screening studies needed to be prospective, primary care based or population based in design. Studies of

risk factors also had to be primary care based or population based. Intervention and outcomes studies had to report results of children diagnosed before 6 months of age, and interventions had to be employed earlier than 1 year of age on average. For intervention studies, EPC staff were particularly interested in functional outcomes, including gait, pain, physical functioning, activity level, peer relations, family relations, school and occupational performance. For noninvasive interventions, another potential benefit is a reduced need for surgery later in childhood. Therefore, intervention studies were eligible if they reported one of these functional outcomes and/or a subsequent need for surgery. Studies that reported only radiological reports of anatomic structural relationships and development, which have not been shown to be valid predictors of functional outcomes, were excluded. For avascular necrosis, the predominant harm from interventions, studies needed to report the rate of this complication in the treated patient population, meet age-based inclusion criteria, have at least 1 year of follow-up, and not experience excessive (>50%) loss to follow-up.

EPC staff used a "best evidence" approach; that is, for each key question, they included studies with weaker designs only if better-designed studies were not available. Case reports, series with 5 or fewer subjects, editorials, letters, nonsystematic review articles, and commentaries were excluded from the evidence review.

NUMBER OF SOURCE DOCUMENTS

Investigators reviewed 1,145 abstracts of English-language articles identified by the searches, excluding 679 citations on first review. Review of an additional 544 abstracts of non-English language articles identified no controlled trials. A total of 466 full-text articles were retrieved and reviewed; 416 were from the electronic searches and 50 were from reference lists or experts' suggestions (list of expert reviewers available upon request from the authors). The following met inclusion criteria: thirteen papers about risk factors; 59 about screening, including 3 controlled trials; 5 about harms of screening; 47 about interventions and harms of interventions, including no controlled trials; and 8 about cost.

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

The U.S. Preventive Services Task Force grades the quality of the overall evidence for a service on a 3-point scale (good, fair, poor):

Good

Evidence includes consistent results from well-designed, well-conducted studies in representative populations that directly assess effects on health outcomes.

Fair

Evidence is sufficient to determine effects on health outcomes, but the strength of the evidence is limited by the number, quality, or consistency of the individual studies, generalizability to routine practice, or indirect nature of the evidence on health outcomes.

Poor

Evidence is insufficient to assess the effects on health outcomes because of limited number or power of studies, important flaws in their design or conduct, gaps in the chain of evidence, or lack of information on important health outcomes.

METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review with Evidence Tables

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Note from the National Guideline Clearinghouse (NGC): A systematic review of the literature was prepared by the Oregon Evidence-based Practice Center (EPC) and Oregon Health & Science University for the Agency for Healthcare Research and Quality (AHRQ) for use by the U.S. Preventive Services Task Force (USPSTF) (see the "Companion Documents" field).

Data Extraction and Synthesis

Data were extracted from each study, entered into evidence tables, and summarized by descriptive and statistical methods as appropriate. EPC staff rated the internal validity of each included study using criteria specific to different study designs developed by the USPSTF. The USPSTF quality criteria can be used to appraise controlled trials, observational, comparative studies such as cohort and case-control studies, and studies evaluating the performance of diagnostic tests. Studies with flaws deemed to invalidate the results were labeled as poor in quality, and were not included in the evidence report.

Most studies of developmental dysplasia of the hip are observational, uncontrolled, or poorly controlled, and have serious flaws in design (grade of II-3 or III according to the original USPSTF classification.) There are no USPSTF criteria to rate such studies good, fair, or poor, but the EPC staff highlight their limitations. To assess the quality of these studies, the following were considered: study design, clarity of diagnostic standards, comparability of subjects, variation in screening approach and/or intervention protocol, duration of follow-up, loss to follow-up, efforts to control for confounding and minimize bias, masking of outcome assessors, and validity and standardization of outcomes measured.

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Balance Sheets
Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

When the overall quality of the evidence is judged to be good or fair, the U.S. Preventive Services Task Force (USPSTF) proceeds to consider the magnitude of net benefit to be expected from implementation of the preventive service. Determining net benefit requires assessing both the magnitude of benefits and the magnitude of harms and weighing the two.

The USPSTF classifies benefits, harms, and net benefits on a 4-point scale: "substantial," "moderate," "small," and "zero/negative."

"Outcomes tables" (similar to "balance sheets") are the USPSTF's standard resource for estimating the magnitude of benefit. These tables, prepared by the topic teams for use at USPSTF meetings, compare the condition specific outcomes expected for a hypothetical primary care population with and without use of the preventive service. These comparisons may be extended to consider only people of specified age or risk groups or other aspects of implementation. Thus, outcomes tables allow the USPSTF to examine directly how the preventive service affects benefits for various groups.

When evidence on harms is available, the topic teams assess its quality in a manner like that for benefits and include adverse events in the outcomes tables. When few harms data are available, the USPSTF does not assume that harms are small or nonexistent. It recognizes a responsibility to consider which harms are likely and judge their potential frequency and the severity that might ensue from implementing the service. It uses whatever evidence exists to construct a general confidence interval on the 4-point scale (e.g., substantial, moderate, small, and zero/negative).

Value judgments are involved in using the information in an outcomes table to rate either benefits or harms on the USPSTF's 4-point scale. Value judgments are also needed to weigh benefits against harms to arrive at a rating of net benefit.

In making its determinations of net benefit, the USPSTF strives to consider what it believes are the general values of most people. It does this with greater confidence for certain outcomes (e.g., death) about which there is little disagreement about undesirability, but it recognizes that the degree of risk people are willing to accept to avert other outcomes (e.g., cataracts) can vary considerably. When the USPSTF perceives that preferences among individuals vary greatly, and that these variations are sufficient to make the trade-off of benefits and harms a "close-call," then it will often assign a C recommendation (see the "Recommendation Rating Scheme" field). This recommendation indicates the decision is likely to be sensitive to individual patient preferences.

The USPSTF uses its assessment of the evidence and magnitude of net benefit to make recommendations. The general principles the USPSTF follows in making recommendations are outlined in Table 5 of the companion document cited below. The USPSTF liaisons on the topic team compose the first drafts of the recommendations and rationale statements, which the full panel then reviews and edits. Recommendations are based on formal voting procedures that include explicit rules for determining the views of the majority.

From: Harris RP, Helfand M, Woolf SH, Lohr KN, Mulrow, CD, Teutsch SM, Atkins D. Current methods of the U.S. Preventive Services Task Force: a review of the process. Methods Work Group, Third U.S. Preventive Services Task Force. Am J Prev Med 2001 Apr; 20(3S): 21-35.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

The U.S. Preventive Services Task Force (USPSTF) grades its recommendations according to one of five classifications (A, B, C, D, I) reflecting the strength of evidence and magnitude of net benefit (benefits minus harms):

A

The USPSTF strongly recommends that clinicians provide [the service] to eligible patients. The USPSTF found good evidence that [the service] improves important health outcomes and concludes that benefits substantially outweigh harms.

B

The USPSTF recommends that clinicians provide [this service] to eligible patients. The USPSTF found at least fair evidence that [the service] improves important health outcomes and concludes that benefits outweigh harms.

C

The USPSTF makes no recommendation for or against routine provision of [the service]. The USPSTF found at least fair evidence that [the service] can improve health outcomes but concludes that the balance of benefits and harms is too close to justify a general recommendation.

D

The USPSTF recommends against routinely providing [the service] to asymptomatic patients. The USPSTF found at least fair evidence that [the service] is ineffective or that harms outweigh benefits.

I

The USPSTF concludes that the evidence is insufficient to recommend for or against routinely providing [the service]. Evidence that the [service] is effective is lacking, of poor quality, or conflicting and the balance of benefits and harms cannot be determined.

COST ANALYSIS

Several economic analyses of screening for developmental dysplasia of the hip have been published. Most concern the marginal benefit of ultrasound screening in relation to screening with clinical examination. None of the available studies used quality adjusted life years, and none used models based upon U.S. data or the U.S. health care system. These analyses demonstrate that the economic impact of ultrasound screening is complex, reflecting that ultrasound may have mixed

effects on diagnosis of developmental dysplasia of the hip: it may identify false positive clinical examinations, reducing or shortening the duration of unnecessary treatments, but it also identifies many abnormalities in infants who have normal physical examinations, potentially leading to more early treatment and greater follow-up costs. The mixed results of the economic studies largely reflect mixed results of the clinical studies on which they are based. The best quality economic study, derived from a randomized controlled trial (in the United Kingdom) of clinical exam screening versus clinical exam plus ultrasound, maintained detailed records of utilization of medical services and related costs. The authors concluded that the overall direct medical costs for the two approaches were not statistically significantly different. This study did not report indirect costs, such as missed work by the family, nor did it include the costs of long-term follow-up or complications.

METHOD OF GUIDELINE VALIDATION

Comparison with Guidelines from Other Groups
External Peer Review
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Peer Review. Before the U.S. Preventive Services Task Force makes its final determinations about recommendations on a given preventive service, the Evidence-based Practice Center and the Agency for Healthcare Research and Quality send a draft systematic evidence review to 4 to 6 external experts and to federal agencies and professional and disease-based health organizations with interests in the topic. They ask the experts to examine the review critically for accuracy and completeness and to respond to a series of specific questions about the document. After assembling these external review comments and documenting the proposed response to key comments, the topic team presents this information to the Task Force in memo form. In this way, the Task Force can consider these external comments and a final version of the systematic review before it votes on its recommendations about the service. Draft recommendations are then circulated for comment from reviewers representing professional societies, voluntary organizations, and Federal agencies. These comments are discussed before the whole U.S. Preventive Services Task Force before final recommendations are confirmed.

Recommendations of Others. Recommendations regarding screening for developmental dysplasia of the hip from the following groups were discussed: The American Academy of Pediatrics (AAP) and The Canadian Task Force on Preventive Health Care (CTFPHC).

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

The U.S. Preventive Services Task Force (USPSTF) grades its recommendations (A, B, C, D, or I) and the quality of the overall evidence for a service (good, fair,

poor). The definitions of these grades can be found at the end of the "Major Recommendations" field.

The USPSTF concludes that evidence is insufficient to recommend routine screening for developmental dysplasia of the hip in infants as a means to prevent adverse outcomes.

I Recommendation.*

The pathophysiology and natural history of developmental dysplasia of the hip (DDH) are poorly understood. There is evidence that screening leads to earlier identification; however, 60% to 80% of the hips of newborns identified as abnormal or as suspicious for DDH by physical examination and >90% of those identified by ultrasound in the newborn period resolve spontaneously, requiring no intervention. There is poor evidence (poor quality studies) of the effectiveness of both surgical and non-surgical interventions; avascular necrosis of the hip (AVN) is reported in 0% to 60% of children who are treated for DDH. Thus, the USPSTF was unable to assess the balance of benefits and harms of screening for DDH but was concerned about the potential harms associated with treatment of infants identified by routine screening.

*Note: Standard language associated with the grade I recommendation is "The USPSTF concludes that the evidence is insufficient to recommend for or against routinely providing {the service}." For this specific recommendation, the USPSTF modified the language to indicate the lack of evidence that screening for a condition with a poorly defined natural history would improve health outcomes while there is evidence that interventions cause known harms.

Clinical Considerations

- This USPSTF screening recommendation applies only to infants who do not have obvious hip dislocations or other abnormalities evident without screening. DDH represents a spectrum of anatomic abnormalities in which the femoral head and the acetabulum are aligned improperly or grow abnormally. DDH can lead to premature degenerative joint disease, impaired walking, and pain. Risk factors for DDH include female gender, family history of DDH, breech positioning, and in utero postural deformities. However, the majority of cases of DDH have no identifiable risk factors.
- Screening tests for DDH have limited accuracy. The most common methods of screening are serial physical examinations of the hip and lower extremities, using the Barlow and Ortolani procedures, and ultrasonography. The Barlow examination is performed by adducting a flexed hip with gentle posterior force to identify a dislocatable hip. The Ortolani examination is performed by abducting a flexed hip with gentle anterior force to relocate a dislocated hip. Data assessing the relative value of limited hip abduction as a screening tool are sparse and suggest the test is of little value in early infancy and is of somewhat greater value as infants age.
- Treatments for DDH include both nonsurgical and surgical options. Nonsurgical treatment with abduction devices is used in early treatment and includes the commonly prescribed Pavlik method. Surgical intervention is used when DDH is severe or diagnosed late or after an unsuccessful trial of non-surgical treatments. Evidence of the effectiveness of interventions is inconclusive because of a high rate of spontaneous resolution, absence of comparative studies of intervention versus nonintervention groups, and

variations in surgical indications and protocols. Avascular necrosis of the hip is the most common and most severe potential harm of both surgical and nonsurgical interventions and can result in growth arrest of the hip and eventual joint destruction with significant disability.

Definitions:

Strength of Recommendations

The USPSTF grades its recommendations according to one of five classifications (A, B, C, D, I) reflecting the strength of evidence and magnitude of net benefit (benefits minus harms):

A

The USPSTF strongly recommends that clinicians provide [the service] to eligible patients. The USPSTF found good evidence that [the service] improves important health outcomes and concludes that benefits substantially outweigh harms.

B

The USPSTF recommends that clinicians provide [this service] to eligible patients. The USPSTF found at least fair evidence that [the service] improves important health outcomes and concludes that benefits outweigh harms.

C

The USPSTF makes no recommendation for or against routine provision of [the service]. The USPSTF found at least fair evidence that [the service] can improve health outcomes but concludes that the balance of benefits and harms is too close to justify a general recommendation.

D

The USPSTF recommends against routinely providing [the service] to asymptomatic patients. The USPSTF found at least fair evidence that [the service] is ineffective or that harms outweigh benefits.

I

The USPSTF concludes that the evidence is insufficient to recommend for or against routinely providing [the service]. Evidence that the [service] is effective is lacking, of poor quality, or conflicting and the balance of benefits and harms cannot be determined.

Strength of Evidence

The USPSTF grades the quality of the overall evidence for a service on a 3-point scale (good, fair, poor):

Good

Evidence includes consistent results from well-designed, well-conducted studies in representative populations that directly assess effects on health outcomes.

Fair

Evidence is sufficient to determine effects on health outcomes, but the strength of the evidence is limited by the number, quality, or consistency of the individual studies, generalizability to routine practice, or indirect nature of the evidence on health outcomes.

Poor

Evidence is insufficient to assess the effects on health outcomes because of limited number or power of studies, important flaws in their design or conduct, gaps in the chain of evidence, or lack of information on important health outcomes.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of evidence supporting the recommendations is identified in the "Major Recommendations" field.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Appropriate use of screening in primary care to detect developmental dysplasia of the hip in infants

POTENTIAL HARMS

There is insufficient evidence on the harms of screening for developmental dysplasia of the hip. Potential harms from screening include examiner-induced hip pathology caused by vigorous provocative testing, elevated risk for certain cancers from increased radiation exposure from follow-up radiographic tests, parental psychosocial stress from the diagnosis and therapy, and false positive results leading to unnecessary and potentially harmful follow-up and intervention.

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

Recommendations made by the U.S. Preventive Services Task Force (USPSTF) are independent of the U.S. Government. They should not be construed as an official position of the Agency for Healthcare Research and Quality (AHRQ) or the U.S. Department of Health and Human Services.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

The experiences of the first and second U.S. Preventive Services Task Force (USPSTF), as well as that of other evidence-based guideline efforts, have highlighted the importance of identifying effective ways to implement clinical recommendations. Practice guidelines are relatively weak tools for changing clinical practice when used in isolation. To effect change, guidelines must be coupled with strategies to improve their acceptance and feasibility. Such strategies include enlisting the support of local opinion leaders, using reminder systems for clinicians and patients, adopting standing orders, and audit and feedback of information to clinicians about their compliance with recommended practice.

In the case of preventive services guidelines, implementation needs to go beyond traditional dissemination and promotion efforts to recognize the added patient and clinician barriers that affect preventive care. These include clinicians' ambivalence about whether preventive medicine is part of their job, the psychological and practical challenges that patients face in changing behaviors, lack of access to health care or of insurance coverage for preventive services for some patients, competing pressures within the context of shorter office visits, and the lack of organized systems in most practices to ensure the delivery of recommended preventive care.

Dissemination strategies have changed dramatically in this age of electronic information. While recognizing the continuing value of journals and other print formats for dissemination, the Agency for Healthcare Research and Quality will make all U.S. Preventive Services Task Force (USPSTF) products available through its [Web site](#). The combination of electronic access and extensive material in the public domain should make it easier for a broad audience of users to access U.S. Preventive Services Task Force materials and adapt them for their local needs. Online access to U.S. Preventive Services Task Force products also opens up new possibilities for the appearance of the annual, pocket-size Guide to Clinical Preventive Services.

To be successful, approaches for implementing prevention have to be tailored to the local level and deal with the specific barriers at a given site, typically requiring the redesign of systems of care. Such a systems approach to prevention has had notable success in established staff-model health maintenance organizations, by addressing organization of care, emphasizing a philosophy of prevention, and altering the training and incentives for clinicians. Staff-model plans also benefit from integrated information systems that can track the use of needed services and generate automatic reminders aimed at patients and clinicians, some of the most consistently successful interventions. Information systems remain a major challenge for individual clinicians' offices, however, as well as for looser affiliations

of practices in network-model managed care and independent practice associations, where data on patient visits, referrals, and test results are not always centralized.

IMPLEMENTATION TOOLS

Foreign Language Translations
Patient Resources
Personal Digital Assistant (PDA) Downloads
Pocket Guide/Reference Cards
Tool Kits

For information about [availability](#), see the "Availability of Companion Documents" and "Patient Resources" fields below.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Staying Healthy

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

United States Preventive Services Task Force (USPSTF). Screening for developmental dysplasia of the hip: recommendation statement. Rockville (MD): Agency for Healthcare Research and Quality; 2006. 10 p. [48 references]

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2006

GUIDELINE DEVELOPER(S)

United States Preventive Services Task Force - Independent Expert Panel

GUIDELINE DEVELOPER COMMENT

The U.S. Preventive Services Task Force (USPSTF) is a federally-appointed panel of independent experts. Conclusions of the U.S. Preventive Services Task Force do not necessarily reflect policy of the U.S. Department of Health and Human Services (DHHS) or its agencies.

SOURCE(S) OF FUNDING

United States Government

GUIDELINE COMMITTEE

U.S. Preventive Services Task Force (USPSTF)

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Corresponding Author: Ned Calonge, MD, MPH, Chair, U.S. Preventive Services Task Force (USPSTF), c/o Program Director, USPSTF, Agency for Healthcare Research and Quality

Task Force Members*: Ned Calonge, MD, MPH, Chair, USPSTF (Acting Chief Medical Officer and State Epidemiologist, Colorado Department of Public Health and Environment, Denver, CO); Janet D. Allan, PhD, RN, CS, Vice-chair, USPSTF (Dean, School of Nursing, University of Maryland, Baltimore, MD); Alfred O. Berg, MD, MPH (Professor and Chair, Department of Family Medicine, University of Washington, Seattle, WA); Paul S. Frame, MD (Family Physician, Tri-County Family Medicine, Cohocton, NY, and Clinical Professor of Family Medicine, University of Rochester, Rochester, NY); Joxel Garcia, MD, MBA (Deputy Director, Pan American Health Organization, Washington, DC); Leon Gordis, MD, MPH, DrPH (Professor, Epidemiology Department, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD); Kimberly D. Gregory, MD, MPH (Director, Women's Health Services Research and Maternal-Fetal-Medicine, Department of Obstetrics and Gynecology, Cedars-Sinai Medical Center, Los Angeles, CA); Russell Harris, MD, MPH (Professor of Medicine, Sheps Center for Health Services Research, University of North Carolina School of Medicine, Chapel Hill, NC); Mark S. Johnson, MD, MPH (Professor and Chair, Department of Family Medicine, University of Medicine and Dentistry of New Jersey-New Jersey Medical School, Newark, NJ); Jonathan D. Klein, MD, MPH (Associate Professor, Department of Pediatrics, University of Rochester School of Medicine, Rochester, NY); Carol Loveland-Cherry, PhD, RN (Executive Associate Dean, Office of Academic Affairs, University of Michigan School of Nursing, Ann Arbor, MI); Virginia A. Moyer, MD, MPH (Professor, Department of Pediatrics, University of Texas Health Sciences Center, Houston, TX); Judith K. Ockene, PhD (Professor of Medicine and Chief of Division of Preventive and Behavioral Medicine, University of Massachusetts Medical School, Worcester, MA); Diana B. Petitti, MD, MPH, (Senior Scientific Advisor for Health Policy and Medicine, Regional Administration, Kaiser Permanente Southern California, Pasadena, CA); Albert L. Siu, MD, MSPH (Professor and Chairman, Brookdale Department of Geriatrics and Adult Development, Mount Sinai Medical Center, New York, NY); Steven M. Teutsch, MD, MPH (Executive Director, Outcomes Research and Management, Merck & Company, Inc., West Point, PA); and Barbara P. Yawn, MD, MSc (Director of Research, Olmstead Research Center, Rochester, MN)

*Members of the USPSTF at the time this recommendation was finalized. For a list of current Task Force members, go to www.ahrq.gov/clinic/uspstfab.htm.

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

The U.S. Preventive Services Task Force has an explicit policy concerning conflict of interest. All members and evidence-based practice center (EPC) staff disclose at each meeting if they have an important financial conflict for each topic being discussed. Task Force members and EPC staff with conflicts can participate in discussions about evidence, but members abstain from voting on recommendations about the topic in question.

From: Harris RP, Helfand M, Woolf SH, Lohr KN, Mulrow, CD, Teutsch SM, Atkins D. Current methods of the U.S. Preventive Services Task Force: a review of the process. Methods Work Group, Third U.S. Preventive Services Task Force. Am J Prev Med 2001 Apr;20(3S):21-35.

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Available from the [U.S. Preventive Services Task Force \(USPSTF\) Web site](http://www.ahrq.gov/clinic/uspstfab.htm).

Print copies: Available from the Agency for Healthcare Research and Quality (AHRQ) Publications Clearinghouse. For more information, go to <http://www.ahrq.gov/news/pubsix.htm> or call 1-800-358-9295 (U.S. only).

AVAILABILITY OF COMPANION DOCUMENTS

The following are available:

Evidence Reviews:

- Shipman SA, Helfand M, Moyer VA, Yawn BP. Screening for developmental dysplasia of the hip: a systematic literature review for the U.S. Preventive Services Task Force. Portland (OR); Oregon Evidence-based Practice Center, Oregon Health & Science University; 2006. 57 p.
- Screening for developmental dysplasia of the hip. Portland (OR); Agency for Healthcare Research and Quality (AHRQ); 2006 Mar. 89 p.

Electronic copies: Available from the [U.S. Preventive Services Task Force \(USPSTF\) Web site](http://www.ahrq.gov/clinic/uspstfab.htm).

Background Articles:

- Woolf SH, Atkins D. The evolving role of prevention in health care: contributions of the U.S. Preventive Services Task Force. Am J Prev Med 2001 Apr;20(3S):13-20.

- Harris RP, Helfand M, Woolf SH, Lohr KN, Mulrow, CD, Teutsch SM, Atkins D. Current methods of the U.S. Preventive Services Task Force: a review of the process. Methods Work Group, Third U.S. Preventive Services Task Force. Am J Prev Med 2001 Apr; 20(3S): 21-35.
- Saha S, Hoerger TJ, Pignone MP, Teutsch SM, Helfand M, Mandelblatt JS. The art and science of incorporating cost effectiveness into evidence-based recommendations for clinical preventive services. Cost Work Group of the Third U.S. Preventive Services Task Force. Am J Prev Med 2001 Apr; 20(3S): 36-43.

Electronic copies: Available from [U.S. Preventive Services Task Force \(USPSTF\) Web site](#).

The following are also available:

- The guide to clinical preventive services, 2005. Recommendations of the U.S. Preventive Services Task Force. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ), 2005. 192 p. Electronic copies available from the [AHRQ Web site](#).

Print copies: Available from the Agency for Healthcare Research and Quality Publications Clearinghouse. For more information, go to <http://www.ahrq.gov/news/pubsix.htm> or call 1-800-358-9295 (U.S. only).

The Interactive Preventive Services Selector tool, which enables users to search USPSTF recommendations by patient age, sex, and pregnancy status, is available as a web-based version or PDA application. It is available from the [AHRQ Web site](#).

PATIENT RESOURCES

The following is available:

- The Pocket Guide to Good Health for Adults. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ); 2003.

Electronic copies: Available from the [U.S. Preventive Services Task Force \(USPSTF\) Web site](#). Copies also available in Spanish from the [USPSTF Web site](#).

Print copies: Available from the Agency for Healthcare Research and Quality (AHRQ) Publications Clearinghouse. For more information, go to <http://www.ahrq.gov/news/pubsix.htm> or call 1-800-358-9295 (U.S. only).

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

NGC STATUS

This NGC summary was completed by ECRI on February 27, 2006.

COPYRIGHT STATEMENT

Requests regarding copyright should be sent to: Gerri M. Dyer, Electronic Dissemination Advisor, Agency for Healthcare Research and Quality (formerly the Agency for Health Care Policy and Research), Center for Health Information Dissemination, Suite 501, Executive Office Center, 2101 East Jefferson Street, Rockville, MD 20852; Facsimile: 301-594-2286; E-mail: gdyer@ahrq.gov.

DISCLAIMER

NGC DISCLAIMER

The National Guideline Clearinghouse™ (NGC) does not develop, produce, approve, or endorse the guidelines represented on this site.

All guidelines summarized by NGC and hosted on our site are produced under the auspices of medical specialty societies, relevant professional associations, public or private organizations, other government agencies, health care organizations or plans, and similar entities.

Guidelines represented on the NGC Web site are submitted by guideline developers, and are screened solely to determine that they meet the NGC Inclusion Criteria which may be found at <http://www.guideline.gov/about/inclusion.aspx>.

NGC, AHRQ, and its contractor ECRI make no warranties concerning the content or clinical efficacy or effectiveness of the clinical practice guidelines and related materials represented on this site. Moreover, the views and opinions of developers or authors of guidelines represented on this site do not necessarily state or reflect those of NGC, AHRQ, or its contractor ECRI, and inclusion or hosting of guidelines in NGC may not be used for advertising or commercial endorsement purposes.

Readers with questions regarding guideline content are directed to contact the guideline developer.

© 1998-2006 National Guideline Clearinghouse

Date Modified: 10/2/2006

